

CLEAN CHEMISTRY FOR TUNGSTEN/TUNGSTEN NITRIDE GATES

ABSTRACT OF THE DISCLOSURE

A process and composition for cleaning debris from a stack etch/ion implanted CMOS device which includes a tungsten gate conductor. The composition includes sulfuric acid and hydrogen peroxide in a volume ratio of at least about 6:1. In the process the composition contacts the CMOS device at atmospheric pressure and a temperature of between about 70° C and about 90° C.